# MODIS Technical Team Meeting Thursday, September 26, 2002 Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Barbara Conboy, Dorothy Hall, Steve Kempler, Ed Masuoka, Bruce Ramsay, Chris Justice, Wayne Esaias, Eric Vermote, and Bill Barnes, with Yolanda Harvey taking the minutes.

# 1.0 Upcoming Events

- 34<sup>th</sup> COSPAR Scientific Assembly, October 10-19, 2002, Houston, TX (abstract deadline past)
- MODIS Outreach Workshop on Land Surface Radiation and Snow and Ice Products, October 21-22, 2002, Boston, MA
- Pecora 15 & Land Satellite Information IV Symposium, November 12-15, 2002, Denver, CO (abstract deadline past)
- EOS Investigator Working Group Meeting, November 18-20, Ellicott City, MD

# 2.0 Meeting Minutes

### 2.1 General Discussion

Salomonson reported that he went to a meeting of the NSIDC Polar DAAC Advisory Group (PoDAG) in Boulder, Colorado. In addition to the many and interesting presentation during the PoDAG meeting, he got to visit with Marilyn Kaminiski and others informally. Terry Haran of NSIDC, is seeing the striping similar to that seen by the Oceans efforts on the Terra 250 m Bands – mirror side differences, etc. – across a 40-detector group. Salomonson said that Haran observed a ~1% change from detector to detector while trying to pull out features of Ice Sheets. In Bands 1 & 2, Detectors 29 & 30, Salomonson said that they are seeing a repeating bright or dark 4th pixel. He wondered if anyone in the Land efforts has seen that before? Barnes requested that Haran send Oceans something to look at, and Salomonson said that he would give Barnes Haran's email address. Salomonson said that while there he got to see merged MODIS and passive microwave data for snow that was quite interesting and also some great capability to interact with the MODIS cloud mask and better understand the effects of the various cloud mask bits as it relates to mapping snow.

Vermote gave demo of the new MMDS CD web-based interface. The interface is a simple html file that opens in a browser. Salomonson asked if everything on the CD will be available through the interface, and Vermote said yes. It doesn't require you to go online, because everything is on the CD. There is an introduction page that shows the discipline's products, and he said that this can go on the MODIS homepage. He added that there are links that allow the users to order data online, and that the interface is much easier for the average user. He said that he wants to add a button in the images section that allows the user to go through visuals of months of data. Salomonson asked if this could go on the ftp site, and Vermote said yes. He suggested adding a flashing link to the ftp site from the MODIS homepage.

Vermote reported that he is in last steps of the re- evaluation of the snow product on the CD. It looks like it can be appropriately corrected.

Salomonson said that the unveiling of the full scale MODIS model will occur October 3<sup>rd</sup> at 3:30 pm in the lobby of Building 33. The model is being presented to Goddard by Raytheon Corp. and Santa Barbara Remote Sensing.

Barnes reported that there will be space for posters in the new Building 33 conference room (H114), and he would like to see MODIS imagery well represented.

## 2.2 Instrument Status

2.2.1 Aqua MODIS

No issues reported.

2.2.2 Terra MODIS

No issues reported.

### **2.3 DAAC**

Kempler reported that they are continuing to ingest Oceans data. They will start Collection 4 on October 16 with date 55 of the year 2000. He reported that they are upgrading their machines to Solaris 8 for security and are making sure that the upgrades don't cause excessive down time.

### 2.4 MODAPS

Masuoka reported on the Direct Broadcast code issue. He said that the MODIS science software is delivered to Pat Coronado's Direct Broadcast site on an "as is basis". Coronado provides this software to users in an institutional directory with a disclaimer which states that what is being provided is the software that runs in the MODIS data processing system. Justice said that he wants to be involved in that discussion, and he stressed that people (users) need to be clear that they can't plug institutional data into DB. Masuoka will check the wording of the disclaimer.

Salomonson reported that there is a new packet of mostly Land products to be included in the DB products.

# 2.5 Oceans

Salomonson asked about the LUTs, and Esaias reported that his people are looking at them. They plan on an October 7<sup>th</sup> delivery, which will maintain the schedule.

Esaias reported that Janet Campbell is serving as an overall editor for the ocean sections, and that some people still have to get back to her. Esaias said that the ocean approach on validation is to declare most products Validated Stage 2 even though there are time periods where uncertainties are smaller or larger than others. Also, that the SST product will be designated as validated overall, based on the work done with the 11 and 12-

micrometer versions. The primary product that is validated is the 11-12 micron product, and uncertainties for the 4-micron product are still being assessed.

# 2.6 Cryosphere

Hall reported on a meeting she attended in Germany. She said that the objective of the meeting at the Max Plank Institute (Hamburg, Germany) was to improve parameterization of snow and ice in the ECMWF - ECHAM5 model. She reported that they are already using black and white sky albedo products provided by Crystal Schaff at Boston University, and they are very happy with them. Hall said that once her group gets Collection 4 data, they will begin making monthly products for the modelers, such as sea ice, snow extent, snow albedo, etc. The meeting was very positive.

## **2.6 Land**

Salomonson asked if the group is working on the Land-Sea Mask, and Vermote said yes. Justice said that it is due on 28<sup>th</sup>. It is currently at Wisconsin, and Justice has sent them a note reminding them of the deadline. Salomonson asked about the ISIN to SIN change, and Justice reported that it is on track.

Salomonson reported that four days have slipped on the reprocessing schedule. Esaias asked if the L1B data is valid through March, and Salomonson said no, it's valid from November 2000 forward. It will be valid from March 2000 forward in Collection 4. Justice said that it will take about three months at 3x processing to catch up, and Salomonson said that they can do eight months of data in 3 months at 3x. He continued that if Atmospheres starts October 19<sup>th</sup>, there is only so much disc space for Land to start in November. He asked Justice if they are prepared to slip a day for a day, and Justice said that they don't want to do that. Salomonson reminded them that there isn't a lot of room for maneuvering here.

Justice reported that he got a positive response from the people on the Australia Deep Space issue, and he is working with them to sort the problem out.

#### **2.7 NOAA**

Ramsay reported that Justice gave a presentation recently on MODIS Land Rapid Response to the NOAA/NESDIS Satellite Products and Services Review Board that were well received. A follow up presentation is scheduled with Helen Wood, Director, Office of Satellite Data Processing and Distribution, for October 2. Depending upon the outcome of the meeting, the MLRRS may be presented to the NESDIS Executive Board on October 8th, at which he is hoping to get support and funding for 2003 or 2004. Salomonson asked about the high-speed link, and Ramsay said that it has been delayed to late February of 2003, and that the delay is mostly due to paperwork issues rather than technical issues. He reported that there is a MODIS volcanic ash paper prepared by Gary Ellrod, PI, ORA, and Jung-Sun Im, IMSG, Inc., for the upcoming AMS conference, and they're hoping to get funding for operational implementation. Salomonson asked about the snow products, and Ramsay said that he is working on having operations modify the operational Interactive Multisensor Snow and Ice Mapping System to display and manipulate near real time SNOWMAP and ICEMAP MODIS products. They are also

working on modifications that will display the southern hemisphere for AVHRR and GOES, and once that is implemented, they will be able to display MODIS southern hemisphere snow and ice products as well.

#### 3.0 Action Items

## 3.1 New Action Items

None.

## 3.2 Old Action Items

3.2.1 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.

Status: Open.

Ed Masuoka and Robert Wolfe plan to meet with the Terra Flight Operations Team to see if they can run definitive ephemeris 2-4 times per day. The context for this issue is to provide better geolocation information for things like fire front tracking and similar issues.

3.2.2 Science Team to update the Terra Data Products Handbook and submit edits and new gray scale imagery to Barbara Conboy within a few weeks.

Status: Open.

Some members of the Oceans, Land, and Atmospheres are still reviewing; Abbott, Barnes, Gordon, Huete, King, Menzel (for Mod 35), Strahler, Vermote, Gao, Townshend, Carder, Kaufman, Wan, Justice, and Myneni have completed their revisions.

3.2.3 Justice to get back to the Technical Team about whether or not the land-water mask will be changed.

Status: Open.

Need to decide whether want to hold up schedule or not to get mask in. Justice sent out emails, waiting for answers.

3.2.4 Esaias to forward draft of Oceans Science Team Meeting summary to Harvey for review and submission to the Earth Observer.

Status: Closed.

3.2.5 Johnston to take a lead on developing a plan/process for the DAAC getting backup data from SDST.

Status: Open.